

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested. Claims 1-17 are pending, Claims 1, 7 and 12 having been amended by way of the present amendment.

In the outstanding Office Action, Claims 1-2, 4, 6-8, 11-13, 15 and 17 were indicated as being anticipated by Murasawa et al. (U.S. Patent No. 6,760,594, hereinafter Murasawa); and Claims 3, 5, 9-10, 14 and 16 were indicated as being unpatentable over Murasawa in view of Leppisaari et al. (U.S. Patent No. 56,532,227, hereinafter Leppisaari).

As a preliminary matter, Applicants respectfully request that the Information Disclosure Statement filed on August 2, 2003 be acknowledged by the Examiner providing the undersigned with an initialed copy of the Form 1449.

Before turning to the rejection on the merits, a brief overview of the disclosed invention is in order. Applicants developed a system and method, by which different thresholds are created for different services, such that higher priority calls may still be able to use the communication system even if the use of the system resources have been determined to be above a predetermined level. For example, as shown in Figure 4, a graph shows time on the X axis and resource usage on the Y axis. Three different thresholds X_0 , X_A and X_B are shown to represent different levels of system utilization. When the system utilization is already above threshold X_B , an incoming call request for a service B (i.e., a lower priority service) will be denied because the resource use condition already exceeds the threshold X_B . However, if the resource use condition is measured to be below the threshold X_A , an incoming call for service A (a higher priority service) will be admitted. In no event will a new call be admitted if the measured resource use condition exceeds the threshold X_A , because the measured resource use condition is in danger of approaching the design limit, namely the threshold X_0 at which the quality of the system deteriorates below an

unacceptable level. Thus, the system and method of the disclosed invention provides at least two thresholds, e.g., X_A and X_B , both of which are below the system design threshold where the quality of the system performance deteriorates.

Claim 1 has been amended to place this method claim in more traditional U.S. claim format, and to better explain that the plurality of threshold values are below the system quality deterioration threshold. In particular, amended Claim 1 is directed to a call admission control method. The method includes a step of setting beforehand a plurality of call admission threshold values for a plurality of services, each of the call admission threshold values having a respective degree of priority. The method also includes a step of comparing the resource use condition and the call admission threshold value corresponding to the service in a requested call. A final step is restricting the requested call in accordance with a comparing step. The call admission threshold value used in a comparing step is a threshold value that is below a system quality deterioration value for the communication system.

Murasawa is directed to a method for connecting priority calls in a wireless communication system. As seen in Figure 2 thereof, Murasawa uses a system that has four different threshold values: Th.I for basic calls; Th.II for a design threshold; Th.III for a maximum threshold; and Th.IV for a critical threshold (see e.g. column 6, lines 4-33). The invention in Murasawa is based on the observation that the critical threshold (Th.IV) is set to be a slightly higher threshold than the maximum design threshold (Th.II) so as to ensure that all design thresholds of different systems (2, 3) can be covered (column 6, lines 23-27). Moreover, in this passage Murasawa is describing a situation where hardware developed for a certain communication system may have a specific hardware capacity (critical threshold) that may be used for different types of systems, such as a cellular system 2, or a wireless local loop 3 (column 6, lines 7-13). These different systems may place different demands on system capacity, and therefore may or may not fully use all the hardware. Therefore, it was

Murasawa's key observation that the critical threshold (Th.IV) is set to be higher than the maximum threshold of either design thresholds for the different systems 2 or 3 and then exploit this difference in threshold values to allow some high priority calls.

Based on this observation, Murasawa sets a new threshold, namely maximum threshold (Th.III), which is set between the critical threshold (Th. IV), constituting an upper limit in terms of hardware, and a design threshold (Th.II), constituting an upper limit terms of software design (see Abstract). Thus, using Murasawa's words, the maximum threshold Th.III which characterizes Murasawa's invention is such that the maximum threshold Th.III is set between the thresholds II and IV (column 6, lines 65-67). In this way, when certain high priority calls are received, those calls may be processed without compulsory disconnection of another call (column 6, lines 30-33). This feature is made possible by Murasawa's observation that there is a "latent safety margin" available for exploitation in the system where the hardware design and the software design capacities do not match one another.

Comparing amended Claim 1 with Murasawa, amended Claim 1 sets the call admission thresholds below the system threshold, while the main idea in Murasawa is to operate above the system design threshold. Moreover, Claim 1 has been amended to recite that the plurality of corresponding threshold values are set below a system quality deterioration threshold value for the communication system. This amendment to Claim 1 finds support throughout the specification, for example page 22, lines 3-12, and therefore no new matter is added.

As all of the features of amended Claim 1 are not found in Murasawa, it is respectfully submitted that the method defined by amended Claim 1, as well as Claims 2-6 which depend therefrom, patentably defines over Murasawa. Although of a different statutory class and/or scope, it is respectfully submitted that independent Claims 7 and 12, as

well as the claims that depend therefrom, also patentably define over Murasawa for substantially the same reasons as discussed with regard to Claim 1.

Claims 3, 5, 9-10, 14 and 16 stand rejected as unpatentable over Murasawa in view of Leppisaari. Leppisaari is asserted for its alleged disclosure of providing a call admission control method that distinguishes between circuit switching systems and packet switching systems (with regard to Claims 3, 9 and 14), as well as FDMA and TDMA systems (with regard to Claims 5, 10 and 16). However, Leppisaari does not teach or suggest the feature discussed above regarding the teaching of a plurality of threshold values that are set below the system quality deterioration threshold value, which is also absent in Murasawa.

Leppisaari is directed to a system that appears not to be combinable with Murasawa in any reasonable way. In particular, Leppisaari is directed to a system in which it is necessary to reallocate physical channels from packet switch services to circuit switch services if the amount of traffic in the network approaches the network capacity (column 3, lines 3-7). Thus, Leppisaari is actually directed to dropping packet switch calls (column 3, line 11) rather than effectively using a call admission control method that does not purposely drop calls. Accordingly, it is respectfully submitted that no matter how Leppisaari is combined with Murasawa, the combination does not teach or suggest all of the features of dependent Claims 3, 5, 9-10, 14 and 16.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-17, as amended,

Application No. 10/054,992
Reply to Office Action of December 13, 2004

is patentably distinguishing over the prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

BDL\la

I:\ATTY\BDL\218810US\218810US-AM.DOC